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To: The Director
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Re: Composite resistive layers for the experiment MUPUS

This is to acknowledge that a product of composite resistive layer designed and processed by Dr Eng. A Łukasik in The Research and Development Centre for Hybrid Microelectronics and Resistors, Kraków - has been successfully applied to the instrument MUPUS and qualified to duty in the ESA Cometary Space Mission Rosetta. The layers serve as a part of a resistive depth sensor in the penetrator of MUPUS.

The applied product met high requirements on space applications and passed a series of tests provided in vacuum and low temperature down to -170°C .

The instrument was designed, manufactured, assembled and tested by Space Research Centre, Polish Academy of Sciences, Warsaw and is dedicated to perform a thermal experiment MUPUS (Multi- Purpose Sub Surface Science) provided by the Institute of Planetology, University of Muenster, Germany in the frame of DLR contribution to the mission Rosetta.

Currently the instrument is delivered to DLR and goes through tests on higher level of integration. Rosetta will be launched by Ariane-5 from the European Spaceport, Kourou, Guayana, January 2003. The experiment will be performed on the nucleus of the comet 46P/Wirtanen, June/July 2012

Prof. Dr. Tilman Spohn
MUPUS Principal Investigator